

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Exhibit A  
Serial No.: Exhibit A  
Filed: Exhibit A  
Date: January 10, 2008

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

POWER OF ATTORNEY AND REVOCATION OF PRIOR POWERS

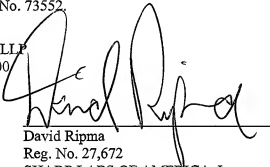
I, David Ripma, Reg. No. 27,672 am an authorized person to sign on behalf of Sharp Labs of America, Inc., having place of business at 5750 NW Pacific Rim Boulevard, Camas, Washington, 98606, assignee of the entire right, title and interest of the United States patents and patent applications, set forth on attached Exhibit A, by assignment recorded in the U.S. Patent and Trademark Office as noted thereon represent that I am empowered to sign on behalf of assignee.

I revoke all power of attorney previously given and appoint the attorneys and agents associated with Customer number 73552 to represent Sharp Labs of America, Inc. before the United States Patent and Trademark Office in connection with patents and patent applications listed on Exhibit A.

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## EXHIBIT A

DO. NO.	PATENT NUMBER	APP. DATE	APP. NO.	GRANT DATE	TITLE
8371-0010	6366704	11/16/98	09/192,831	4/2/02	METHOD AND APPARATUS FOR A DELAY-ADAPTIVE RATE CONTROL SCHEME FOR THE FRAME LAYER
8371-0027	6272180	4/19/99	09/295,233	8/7/01	COMPRESSION AND DECOMPRESSION OF REFERENCE FRAMES IN A VIDEO DECODER
8371-0030	6985524	9/1/99	09/388,831	1/10/06	APPARATUS AND METHOD FOR ADJUSTING REAL TIME VIDEO TO COMPENSATE FOR COLOR BLINDNESS
8371-0033	6404443	8/25/99	09/383,040	6/11/02	THREE-DIMENSIONAL GRAPHICAL USER INTERFACE FOR MANAGING SCREEN OBJECTS
8371-0036	6417867	5/27/99	09/321,519	7/9/02	IMAGE DOWNSCALING USING PERIPHERAL VISION AREA LOCALIZATION
8371-0037	6522783	11/23/99	09/448,061	2/18/03	RE-INDEXING FOR EFFICIENT COMPRESSION OF PALLETIZED IMAGES
8371-0038	6535251	10/26/99	09/427,889	3/18/03	VIDEO ENCODER AND METHOD FOR ADJUSTING QUANTIZATION STEP IN REAL TIME
8371-0044	6188520	10/29/99	09/430,376	2/13/01	LIGHT POLARIZATION CONVERTER
8371-0047	6259828	1/28/00	09/493,410	7/10/01	SPRITE-BASED VIDEO CODING SYSTEM WITH AUTOMATIV SEGMENTATION INTEGRATED INTO CODING AND SPRITE BUILDING PROCESSES
8371-0050	6707952	5/30/00	09/584,036	3/16/04	METHOD FOR REMOVING RINGING ARTIFACTS FROM LOCATIONS NEAR DOMINANT EDGES OF AN IMAGE RECONSTRUCTED AFTER COMPRESSION
8371-0051	6462788	5/30/00	09/584,333	10/8/02	METHOD AND SYSTEM FOR REMOVING COLOR BLEEDING ARTIFACTS BY FILTERING THE CHROMINANCE PLANE OF DECOMPRESSED IMAGES
8371-0052	6747762	11/5/99	09/435,200	6/8/04	METHOD FOR OPTIMIZING COMPRESSION OF SCANNED DATA
8371-0053	6226388	1/5/99	09/225,187	5/1/01	METHOD AND APPARATUS FOR OBJECT TRACKING FOR AUTOMATIC CONTROLS IN VIDEO DEVICES
8371-0054	6950130	1/5/99	09/225,189	9/27/05	METHOD OF IMAGE BACKGROUND REPLACEMENT

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8371-0055	6411740	12/22/98	09/218,937	6/25/02	METHOD FOR NON-UNIFORM QUANTIZATION IN A RESOLUTION HIERARCHY BY USE OF A NONLINEARITY
8371-0056	6993789	4/23/99	09/298,282	1/31/06	DTV DATA SERVICE APPLICATION AND RECEIVER MECHANISM
8371-0059	6671420	2/16/99	09/250,680	12/30/03	METHOD FOR PROCESSING SATURATED INTERVALS IN VIDEO SEQUENCES
8371-0060	6496603	2/8/99	09/246,263	12/17/02	ENHANCING ERROR DIFFUSION BY USING DIRECTIONAL GUIDED LINE THRESHOLDING
8371-0061	6671062	2/25/99	09/258,684	12/30/03	JOURNALING TECHNIQUE FOR REVERSE ORDER PRINTING
8371-0064	6826688	3/27/99	09/277801	11/30/04	METHOD AND APPARATUS FOR DETERMINING THE IDENTITY OF A DIGITAL PRINTER FROM ITS OUTPUT
8371-0065	6342925	2/26/99	09/259,157	1/29/02	AUTOMATIC AUDIO AND VIDEO PARAMETER ADJUSTMENT
8371-0066	6320621	3/27/99	09/277,800	11/20/01	METHOD OF SELECTING A DIGITAL CLOSED CAPTIONING SERVICE
8371-0069	6570668	4/26/99	09/299,816	5/27/03	METHOD OF MODIFYING PRINTER DRIVER OUTPUT
8371-0071	6519654	7/7/99	09/349,059	2/11/03	METHOD OF DESIGNING AN INTERFACE FOR A REAL-TIME MESSAGING SYSTEM
8371-0072	6552823	6/1/99	09/323,583	4/22/03	ENHANCED ERROR DIFFUSION BY USING PEAK POSITION PROFILES
8371-0073	6353686	3/5/99	09/263,115	3/5/02	METHOD FOR NON-UNIFORM QUANTIZATION IN A RESOLUTION HIERARCHY BY TRANSMISSION OF BREAK POINTS OF A NON-LINEARITY
8371-0077	6704792	8/10/99	09/371,660	3/9/04	SIMPLE NETWORK MANAGEMENT PROTOCOL (SNMP) SUB-AGENT INTERFACE
8371-0078	6940876	2/28/00	09/514,138	9/6/05	SYSTEM TARGET DECODER WITH SECONDARY MULTIPLEXING
8371-0079	6476871	8/25/99	09/382,522	11/5/02	TEXT DISPLAY ON REMOTE DEVICE
8371-0081	6658162	10/31/99	09/417,873	12/2/03	IMAGE CODING METHOD USING VISUAL OPTIMIZATION
8371-0083	6671068	9/30/99	09/408,626	12/30/03	ADAPTIVE ERROR DIFFUSION WITH IMPROVED EDGE AND SHARPNESS PERCEPTION
8371-0084	6658484	9/23/99	09/404,612	12/2/03	MESSAGE CONTROL SYSTEM

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DO. NO.	PATENT NUMBER	APP. DATE	APP. NO.	GRANT DATE	TITLE
8371-0085	6556313	9/27/99	09/405,966	4/29/03	VECTOR METHOD FOR COLOR MISREGISTRATION DETECTION IN IMAGE DATA
8371-0086	6477524	12/21/99	09/468,508	11/5/02	METHOD FOR STATISTICAL TEXT ANALYSIS
8371-0087	6441867	10/22/99	09/426,165	8/27/02	BIT-DEPTH EXTENSION OF DIGITAL DISPLAYS USING NOISE
8371-0089	6859228	10/18/99	09/419,602	2/22/05	LEAST SQUARES METHOD FOR COLOR MISREGISTRATION DETECTION AND CORRECT IN IMAGE DATA
8371-0091	6654037	11/10/99	09/437,983	11/25/03	EMBEDDED WINDOWS IN BACKGROUND IMAGE
8371-0092	6848002	12/1/99	09/452,235	1/25/05	SYSTEM AND METHOD FOR OPTIMAL SELECTION AND PRESENTATION OF STREAMING MEDIA TYPES
8371-0093	6765693	3/20/00	09/527,887	7/20/04	PHOTO QUALITY COLOR PRINTING BY USING LIGHT BLACK INK
8371-0095	6833932	3/31/00	09/540,600	12/21/04	METHOD FOR ELIMINATION OF SPATIAL ARTIFACTS IN DIGITAL IMAGING
8371-0099	6622190	4/27/00	09/564,265	9/16/03	METHOD FOR MODIFYING TASK EXECUTION PRIORITY IN A MULTITASKING WINDOWED OPERATING ENVIRONMENT
8371-0100	6646658	5/17/00	09/574,674	11/11/03	TAGGING DATA FILES WITH APPLICATION INFORMATION
8371-0101	6701009	6/6/00	09/588,848	3/2/04	METHOD OF SEPARATED COLOR FOREGROUND AND BACKGROUND PIXEL IMPROVEMENT
8371-0104	7277203	9/21/00	09/667,964	10/2/07	METHOD OF IMPROVING START-UP BEHAVIOR FOR COLOR ERROR DIFFUSION DIGITAL HALFTONING
8371-0106	7075676	12/19/00	09/741,199	7/11/06	METHOD FOR ATTACHING AS A BARCODE TO THE PRINTOUT
8371-0108	6798543	09/31/00	09/660,754	9/28/04	METHOD AND APPARATUS FOR COMPRESSION AND DECOMPRESSION OF HALFTONED IMAGES
8371-0111	6894791	8/25/00	09/649,433	5/17/05	METHOD AND APPARATUS FOR AUTOMATIC PAPER PREVIEW
8371-0112	6947159	8/24/00	09/645,868	9/20/05	USING A PAPER PREVIEW IN DOCUMENT MANAGEMENT APPLICATIONS

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DO. NO.	PATENT NUMBER	APP. DATE	APP. NO.	GRANT DATE	TITLE
8371-0119		3/30/01	09/823,511		DEVICES, SOFTWARES AND METHODS FOR RESCHEDULING MULTI-PARTY SESSIONS UPON PREMATURE TERMINATION OF SESSION
8371-0120	6995866	3/14/01	09/808,862	2/7/06	METHOD AND APPARATUS FOR BACKGROUND ADJUSTMENT IN COLOR REPRODUCTION DEVICES
8371-0122	7006255	3/29/01	09/823,027	2/28/06	ADAPTIVE IMAGE FILTERING BASED ON A DISTANCE TRANSFORM
8371-0123	7219168	2/13/01	09/784,227	5/15/07	METHOD AND SYSTEM FOR A GENERIC DOCUMENT PROCESSING DEVICE CLIENT
8371-0124	6865298	3/30/01	09/823,399	3/8/05	COMPOUND DOCUMENT COMPRESSION BASED UPON NEIGHBORING PIXELS
8371-0125	6846688	3/30/01	09/823,521	1/25/05	METHOD OF MANUFACTURING A LIQUID CRYSTAL DISPLAY DEVICE WITH A MULTI- LAYER INTERLAYER INSULATOR
8371-0128	6915019	3/30/01	09/823,497	7/5/05	METHOD FOR COMBINING VECTOR- QUANTIZATION DECODING WITH COLOR TRANFORM OR HALFTONING OR BOTH
8371-0129	6900083	8/31/01	09/945,063	5/31/05	METHOD OF FORMING MULTI-LAYERS FOR A THIN FILM TRANSISTOR (TFT) AND THE DEVICE FORMED THEREBY
8371-0135	6944225	7/24/01	09/912,799	9/13/05	RESOLUTION -SCALABLE VIDEO COMPRESSION
8371-0136	6807312	7/13/01	09/905,565	10/19/04	ROBUST CODEBOOKS FOR VECTOR QUANTIZATION
8371-0137	6870581	10/30/01	10/003,947	3/22/05	SINGLE PANEL COLOR VIDEO PROJECTION DISPLAY USING RELECTIVE BANDED COLOR FALLING-RASTER ILLUMINATION
8371-0144		10/19/01	10/055,207		MULTI-LAYER DATA TRANSMISSION SYSTEM
8371-0147		2/1/02	10/062,387		BIT-DEPTH EXTENSION WITH MODELS OF EQUIVALENT INPUT VISUAL NOISE
8371-0152	7256901	10/2/02	10/269,378	8/14/07	PRINTER DRIVER CUSTOMIZATION USING INCREMENTAL CUSTOM PRINT PROCESSOR
8371-0154					INFRINGEMENT STUDY OF US PATENT NO. 5,077,582

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DO. NO.	PATENT NUMBER	APP. DATE	APP. NO.	GRANT DATE	TITLE
8371-0158	7272779	3/31/03	10/404,795	9/18/07	SYNCHRONIZED MUSICAL SLIDESHOW LANGUAGE
8371-0160		3/31/03	10/404,986		TRANSMITTING DATA ON SCHEDULED CHANNELS IN A CENTRALIZED NETWORK
8371-0161		3/31/03	10/404,974		RELAY TRANSMISSION OF DATA IN A CENTRALIZED NETWORK
8371-0162		9/15/03	10/663,406		CONNECTION MANAGEMENT IN A CENTRALIZED COMMUNICATION SYSTEM
8371-0166		1/27/04	10/765,504		METHOD FOR REMOVING RINGING ARTIFACTS FROM LOCATION NEAR DOMINANT EDGES OF AN IMAGE RECONSTRUCTED AFTER COMPRESSION
8371-0167		1/6/04	10/753,934		TELEVISION REMOTE CONTROL SYSTEM AND METHOD WITH ALPHANUMERIC INPUT
8371-0172	6956511	10/7/04	10/961,453	10/18/05	MULTI-SYMBOL/COEFFICIENT DECODE OPERATION FOR HUFFMAN CODES
8371-0173		8/3/04	10/911,032		IMPROVED FILE PATH IDENTIFICATION AND DISPLAY
8371-0177		10/15/04	10/966,277		METHOD AND APPARATUS FOR FINDING APPLICATIONS AND RELATING ICONS LOADED ON A TELEVISION
8371-0178		1/6/04	10/976,498		METHOD AND APPARATUS FOR SYNCHRONIZATION OF PLURAL MEDIA STREAMS
8371-0180		10/7/04	10/961,285		SYSTEM FOR REMOTE SHARE ACCESS
8371-0181		10/7/04	10/960,997		INTELLIGENT DISCOVERY OF SHARES
8371-0182		10/7/04	10/962,814		TELEVISION WITH APPLICATION/STREAM-SPECIFIABLE LANGUAGE SELECTION
8371-0183		10/20/04	10/970,407		UNIVERSAL PLUG AND PLAY REMOTE AUDIO MIXER
8371-0184		5/12/06	11/382,989		DUAL-PLANE GRAPHICS
8371-0185		10/29/04	10/977,213		INTERACTIVE TELEVISION HOT KEY MANAGER
8371-0186		8/3/04	10/910,932		INTERACTIVE TELEVISION ALERT MANAGER
8371-0187	7167418	10/29/04	10/977,465	1/23/07	TELEVISION INCLUDING A TIMER
8371-0188		10/29/04	10/976,385		OPERATING MODES FOR A PERSONAL VIDEO RECORDER

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8371-0191		10/29/04	10/976,388		METHOD AND APPARATUS FOR UPGRADING A TELEVISION SYSTEM
8371-0192		10/17/05	11/252,423		OPERATION MODES FOR A PERSONAL VIDEO RECORDER USING DYNAMICALLY GENERATED TIME STAMPS
8371-0195		7/29/04	10/909,221		METHOD AND APPARATUS FOR HANDLING DIFFERENT PRINT DATA FORMATS
8371-0196	7251052	6/15/04	10/869/792	7/31/07	METHOD AND APPARATUS FOR SELECTING JOB CONTROL DEVICE PROFILES
8371-0197		9/14/04	10/941,142		CONTINUOUS RASTER IMAGE PROCESSING CONTROL ACROSS PRINT JOBS
8371-0198		6/15/04	10/869,793		METHOD AND APPARATUS FOR SELECTING PRINTING DEVICES ACCORDING TO RESOURCE AVAILABILITY
8371-0199		6/16/04	10/870,595		DEVICE MANAGEMENT SYSTEM AND METHOD
8371-0201		11/14/05	11/274,694		METHOD AND APPARATUS FOR ADAPTIVE BUFFERING
8371-0202		12/20/05	11/313,553		METHOD AND APPARATUS FOR DYNAMICALLY ADJUSTING QUANTIZATION OFFSET VALUES
8371-0203		4/13/05	11/105,729		METHOD AND APPARATUS FOR CONTROLLING LOOP FILTERING OR POST FILTERING IN BLOCK BASED MOTION COMPENSATIONED VIDEO CODING
8371-0204		5/26/05	11/139,963		METHOD AND APPARATUS FOR ADAPTIVE UP-SCALING FOR SPATIALLY SCALABLE CODING
8371-0211		1/12/04	10/755,637		NONVOLATILE SOLID STATE ELECTRO-OPTIC MODULATOR
8371-0212		5/12/06	11/383,183		METHOD AND APPARATUS FOR PROVIDING FEEDS TO USERS
8371-0213		5/10/06	11/382,665		METHOD AND APPARATUS FOR COMMUNICATING POPULARITY RATINGS TO USERS

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8371-0215		12/11/06	11/609,305		INTEGRATED PAPER AND COMPUTER- BASED TESTING ADMINISTRATION SYSTEM
8371-0216		11/22/06	11/562,815		INTELLIGENT PAGE BUFFER ALLOCATION
8371-0218		2/13/07	11/674,616		RASTER OPERATION TABLE CONVERSION FOR COLOR SPACES
8371-0219		2/12/07	11/674,120		GAMUT MAPPING FOR PRINTER COLOR RENDERING
8371-0220		2/16/07	11/676,259		COLOR INFORMATION ENCODING IN MONOCHROME PRINTING
8371-0221		4/16/07	11/735,949		TELEVISION HAVING A JAVA ENGINE AND REMOVABLE DEVICE PORT
8371-0223		5/25/07	11/754,260		MULTI-DEPTH ERROR DIFFUSION FOR THE REPRODUCTION OF COLOR OR MONOCHROME IMAGES
8371-1000		9/8/04	10/935,763		COLOR ERROR DIFFUSION METHOD